III Semester M.Com. (F.A.)/M.F.A. Examination, January 2018 (CBCS) (Semester Scheme) Paper 3.3: FOREX AND DERIVATIVES

Time: 3 Hours

Max. Marks: 70

SECTION-A

Answer any seven questions. Each question carries 2 marks.

 $(7 \times 2 = 14)$

- 1. a) What is Arbitrage?
 - b) What is TT buying rate?
 - c) Define European and American options.
 - d) Define financial swap.
 - e) What are caps and floors?
 - f) What is translation exposure?
 - g) What are derivatives?
 - h) Distinguish hedgers and speculators.
 - i) What is cantago?
 - j) What is VaR?

SECTION-B

Answer any four questions. Each question carries 5 marks.

(4×5=20)

A forex dealer gives quotes for USD spot, 1 month forward, 3 month forward and 6 month forward

Rs. 63.70 - 63.90
$$\frac{1MF}{8/9}$$
 $\frac{3MF}{6/5}$ $\frac{6MF}{7/6}$

Calculate the outright quote for 1 MF, 3 MF and 6 MF rates. Assuming USD are bought, what is the premium/discount for 3 month forward rate?

- 3. Explain the determinants of currency options.
- 4. Explain the differences between forward and futures contract.
- 5. What is translation exposure? Explain the methods under the same.

P.T.O.



- 6. A call option with an exercise price of Rs. 72 due to expire in 10 days time is selling at Rs. 2.25. The underlying share is selling in the market at Rs. 76. How can an arbitrageur benefit in this scenario, assuming that the contract settlement will be through delivery?
- Following are the details of cash inflows and outflows in a foreign currency of M/s ABC Ltd. an Indian exporting company which has no foreign subsidiaries.

Currency	Inflows	Outflows	Spot rate Rs.	Forward rate Rs.
USD	4,00,00,000	2,00,00,000	64.14	64.64
F.Fr	2,00,00,000	80,00,000	7.45	8.12
U.K.£.	3,00,00,000	2,00,00,000	75.57	75.98
Japyen	15,00,000	25,00,000	3.20	2.40

Determine the net exposure of each currency in terms of rupees.

SECTION - C

Answer any three questions. Each question carries 12 marks.

 $(3 \times 12 = 36)$

- 8. Explain the various types of hedging strategy used to hedge translation exposure.
- A. U.K. based exporting company has export receivables of US \$ 3,50,000 in 3 months. The exchange rates in London are

USD/£ 1.5865 - 1.5905

3 months forward rate - USD/£ 1.6100 - 1.6140.

Rates of interest in money market

Deposit Loans

USD	7%	9%
£	5%	8%

Compute and show how money market hedge can be used. Compare and contrast the outcome of the forward contract.

 Consider the following information with regard to a call option on the stocks of ABC Ltd.

Current market price (Sc)	Rs. 115
Time period to expiration	3 months
Standard deviation (๑)	0.60
Continuously compounded risk free interes	st rate (r) 0.10
Find the value of call option using Black and	d Scholes model.

- 11. "Covered interest arbitrage" is an hedging instrument, explain.
- 12. Discuss the features of foreign exchange market.